

12 DIGIT HEAVY DUTY PRINTING CALCULATOR



INSTRUCTION MANUAL

Preface

Congratulations on your choice of a Victor electronic calculator. Careful design, quality materials, painstaking workmanship, and advanced research and production facilities have given you a calculator that, with proper care, will provide you years of trouble-free service. To assure future optimum performance, ask your Victor representative about low-cost protection offered by Victor's Extended Guarantee Protection Program.

This operating manual describes the features and operation of the Victor PL 3000 electronic calculator.

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1. OPERATIONS AND MAINTENANCE

Printer Switch – This switch is located on upper portion of the keyboard. Slide the switch depend on your application.

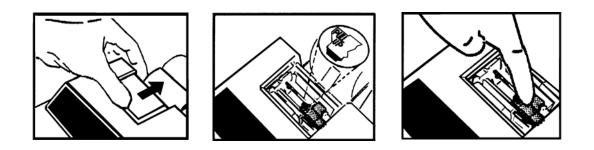
- OFF Power OFF the Calculator.
- NP Non-print mode, if only the display is needed.
- P Print mode, if you wish to have the printer to be operational.

CAUTIONS

- The calculator must not be covered when turned on. This will cause the unit to overheat.
- Do not use organic solutions such as alcohol to clean the housing.
- Do not use or leave the calculator in direct sun light. Areas subject to quick temperature changes, high humidity and dirt should be avoided.

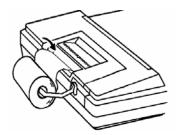
2. REPLACING INK CARTRIDGE

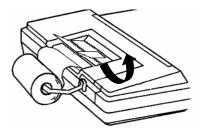
- 1. Remove printer cover.
- 2. Remove ink cartridge.
- 3. Insert new cartridge.



3. LOADING PAPER

- 1. Plug in calculator and turn it on.
- 2. Cut or tear evenly the end of paper rolls to get a straight, even edge for proper feeding through the printer head.
- 3. While holding the paper roll in one hand, feed the paper from the bottom of the roll and insert into the paper slot at the back of the calculator.
- 4. Depress paper feed key until the paper catches and advances through the printer.
- 5. Place the paper roll on the dual paper holders.



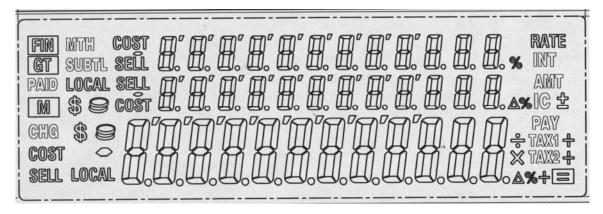


Correct method of removing the paper

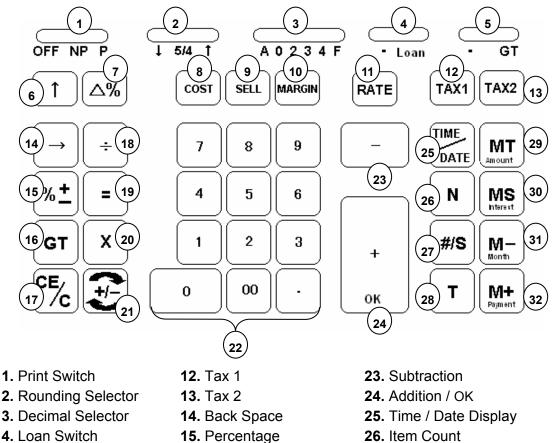
PLEASE TAKE NOTE :

- 1. Please **<u>DO NOT</u>** pull the paper in a reverse way once the paper is loaded into the printer.
- 2. Please **<u>DO NOT</u>** pull the paper out from the printer.
- <u>ALWAYS</u> tear the paper with a Paper Cutter before removing the paper from the printer.

4. DISPLAYED SYMBOLS



5. KEYBOARD LAYOUT



- 5. Grand Total Switch
- 6. Paper Feed
- 7. Delta Percentage
- 16. Grand Total
- 17. Clear Entry / Clear
- **18.** Division
- 27. Subtotal / Date
- **28.** Total
- **29.** Memory Total / Amount

8. Cost	19. Equal	30. Memory Subtotal / Interest
9. Sell	20. Multiplication	31. Memory Subtraction / Month
10. Margin	21. Sign Change	32. Memory Addition / Payment
11. Tax Rate Preset	22. Numeric Key Pad	

6. SLIDER SWITCH FEATURES

1. OFF NP P Printer Selects Switch

OFF Turn OFF the calculator.

NP (Non-print) Printer is activated only when feed key or non-add/date key is pressed.

PRINT Printer is activated as long as calculator is turned on.

2. \downarrow 5/4 \uparrow Rounding Switch

Absolute round down.

- **5/4** Final result is rounded up if the 1st digit not to be printed is 5 or more and rounded down if the 1st digit not to be printed is 4 or less.
- ↑ Absolute round up.

3. A 0 2 3 4 F Decimal Point Selector

- A Add mode. The decimal point is automatically placed before the last two digits in addition and subtraction.
- **0,2,3,4** For multiplication and division, decimal point is set to the result of calculation. For addition and subtraction, decimal point is set to all entries. To all the results, number in the decimal place to the last decimal place designated will be rounded. For example, number at 3rd decimal place is rounded at "2" position.
- **F** Automatic floating point for decimally accurate computing. Decimal point is entered at desired position and the decimal point is automatically shifted to the right is under 14 digits of integer.

4. Loan Switch

• Memory calculation is on. Loan calculation is off. MT, MS, M-, and M+ keys are activated.

Loan Loan calculation is on. Memory calculation is off. Amount, Interest, Month, and Payment keys are activated.

5. Grand Total Switch

- Calculation without Grand Total
- **GT** Any total taken with the **T** key is automatically accumulated to Grand Total. The accumulated grand total can be recalled by pressing the **GT** key.

7. KEY FEATURES

6. [[↑]] Paper feed key

Advance the paper roll.

7. [∆%] Delta Percentage

Automatically compares any two amounts and then calculates and prints the percent change.

8. [COST] Cost key

Calculate amount exclude profit margin. Used to enter the cost when determining the margin or sell price.

9. [SELL] Sell key

Calculate amount include profit margin. Used to enter the sell price when determining the cost or margin.

10. [MARGIN] Profit margin

Used to enter profit margin. Used to enter the profit margin when determining the cost or sell price.

11. [RATE] TAX rate preset key

Used to enter TAX rate.

12. [TAX1] Tax 1 key

Calculate an amount **Value Added Tax (VAT)** with tax rate preset by **RATE** key. Use + key for calculating an amount including VAT, and – key for calculating an amount excluding VAT.

13. [TAX2] Tax 2 key

Calculate an amount VAT with tax rate preset by **RATE** key. Use + key for calculating an amount including VAT, and – key for calculating an amount excluding VAT.

14. $[\rightarrow]$ Right shift key

Deletes right most character of a live entry

15. [%<u>+</u>] Percent key

Completes percent calculation when Multiple or Division key is used.

16. [GT] Grand Total key

Print and clear the Grand Total Accumulator.

17. [CE/C] Clear Entry / Clear key

Clears a live entry by pressing this key once. Press twice to clear the accumulator or pending calculation. Does not clear the Memory or Grand total.

18. [+] Division key

To divide, enter the number to be divided (dividend) then depress the Divide key. Then enter the second number (divisor) and depress Equals or other keys as necessary to obtain a result. If the key is depressed repeatedly, it will make sequential division calculations.

19. [=] Equal key

To get the result in multiplication or division.

20. [X] Multiplication key

To multiply, enter the first number (multiplicand) and depress the Times key. Then enter the second number (multiplier) and depress Equals or other keys as necessary to obtain a result. If the key is depressed repeatedly, it will make sequential multiple calculations.

21. [+/-] Sign change key

Reverse the sign on the display.

22. [0]-[9], [00] & [•] Numeric keys.

Any numeral over 12 digits will be ineffective. When decimal point key is used more than once in one numeral, the first decimal point will be considered as effective.

23. [-] Minus key

Subtracts an amount from the accumulator. To subtract the same amount more than one time (repeat subtraction), enter that amount once and depress the Minus key as many times as necessary. If this key is depressed immediately after **[%]** key, it works as percent minus key.

24. [+] Plus key

Adds an amount to the accumulator. To add the same amount more than one time (repeat addition), enter that amount once and depress the Plus key as many times as necessary. If this key is depressed immediately after **[%]** key, it works as percent plus key.

25. [TIME/DATE] Time and Date display key

Used to display or program the date and time. Depressing this key once will cause the date to display, a second depression will display the time. Holding the key down for three seconds will cause the date or time to flash, this is the program mode.

26. [N] Item Count key

Calculations with item count.

27. [# / S] Date / Subtotal key

#: Prints the entered figure as an identifier or invoice number with the "#" symbol.

S: Prints a Subtotal of the numbers in the accumulator without clearing the accumulator. Used if the operator needs to see what's in the accumulator, then

proceed without clearing the accumulator.

28. [T] Total key

Prints and clears the accumulator. When this key is pressed with the "GT" switch on, the result is accumulated automatically in the grand total memory.

29. [MT / Amount] Memory Total key / Amount

If the Loan switch is off, MT is activated and if the Loan switch is on, Amount is activated.

- **MT:** Prints and clears the memory.
- Amount: If this key is pressed after a value is entered, it is entered as the Loan Amount. However, if Interest, Month, and Payment are entered in prior or modification is done on any of the three as above in prior, user can calculate / recalculate the Loan Amount by press this key.

30. [MS / Interest] Memory Subtotal key / Interest If the Loan switch is off, MS is activated and if the Loan switch is on, Interest is activated.

- MS: Prints but do not clear the memory.
- Interest: If this key is pressed after a value is entered, it is entered as the Loan Interest. However, if Amount, Month, and Payment are entered in prior or modification is done on any of the three as above in prior, user can calculate / recalculate the Loan Interest by press this key.

31. [M- / Month] Memory Minus key / Months

If the Loan switch is off, M- is activated and if the Loan switch is on, the Month function is activated.

- M-: Subtracts an amount from memory. If there is a live calculation pending, the Memory Minus key will complete the calculation and subtract the amount from Memory.
- **Month:** If this key is pressed after a value is entered, it is entered as Number of Months to settle the Loan. If Amount, Interest, and Payment are entered in prior, or modification is done on any of the three as above in prior, user can calculate / recalculate the Number of Months by press this key.

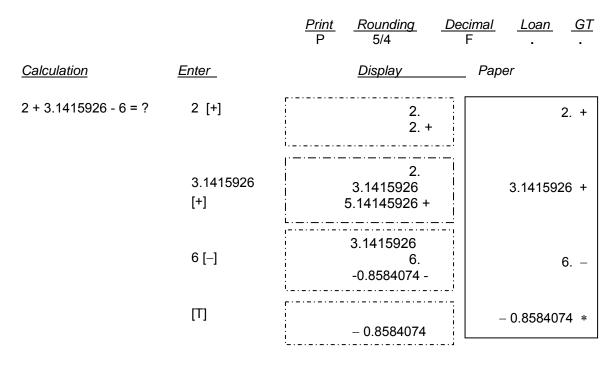
32. [M+ / Payment] Memory Plus key / Payment

If the Loan switch is off, M+ is activated and if the Loan switch is on, the Payment function is activated.

- **M+:** Adds an amount to memory. If there is a live calculation pending, the Memory plus key will complete the calculation and accumulate the result to Memory.
- **Payment:** If this key is pressed after a value is entered, it is entered as the Payment. If Amount, Interest, and Months are entered in prior, or modification is done on any of the three as above in prior, user can calculate / recalculate the Payment by press this key.

8. CALCULATION EXAMPLES

1. ADDITION / SUBTRACTION



2. ADDITION / SUBTRACTION IN ADD MODE

Print	Rounding	Decimal	Loan	GT
Р	5/4	A	•	

<u>Calculation</u>	<u>Enter</u>	<u>Display</u>	<u>Paper</u>
1.23 - 4.56 + 7.89 = ?	123 [+]	1.23 1.23 +	1.23 +
	456 [–]	1.23 4.56 -3.33 -	4.56 –
	[#/S]	1.23 4.56 -3.33	- 3.33 👌
	789 [+]	4.56 7.89 4.56 +	7.89 +
	[1]	4.56	4.56 *

3. ITEM COUNT PRESETTING

		<u>Print</u> P	<u>Rounding</u> 5/4	<u>Decimal</u> A	Loan	<u>GT</u>		
		P			•	•		
<u>Calculation</u>	<u>Enter</u>	·····	<u>Display</u>	<u>Pape</u>	<u>er</u>			
Setting	[CE/C]		0.					
Item Count Plus		!		i		0. C		
Count Plus	[N] (Press & Hold 3 sec)		(Blinking) ^{IC+} 0.	000				
	[+]	·	IC+	·:				
			0.					
	[CE/C]	r	IC+		- - - -			
		i i i	0.					
Setting Item	[N]	[·-·-·	(Dlinking) IC+	 !		0. C		
Count Plus/Minus	(Press & Hold 3 sec)		(Blinking) 0.	000	000			
	[-]		(Blinking) IC \pm					
		 	0.					
				!				

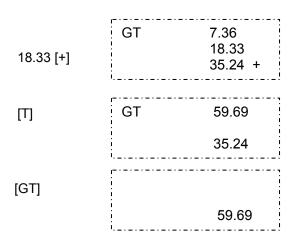
4. ADDITION / SUBTRACTION WITH ITEM COUNT

		<u>Print</u> P	<u>Rounding</u> 5/4	Dee	<u>cimal</u> A	<u>Loan</u>	<u>GT</u>
Calculation	<u>Enter</u>		<u>Display</u>		<u>Pape</u>	<u>r</u>	
11.32 + 7.98 – 33.33 = ?	1132 [+]		11.32 11.32	+		11.3	32 +
	798 [+]		11.32 7.98 19.30	+		7.9	98 +
	[N]		IC 2.	+	002		
	[#/S]		19.30	· - ·		19.	30 👌
	3333 [–]	· - · - · - · - · - · - · - · - · - · -	33.33 -14.03 -			33.:	33 –
	[N]		іс 3.	+	001		
			-14.03			- 14.	03 *
		12					0. C



5. GRAND TOTAL MEMORY	

5. GRAND TOTAL ME	MORT	<u>Print</u> P	<u>Rounding</u> 5/4	<u>Decimal</u> A	<u>Loan</u>	<u>GT</u> GT			
Calculation	<u>Enter</u>		<u>Display</u>	Pape	<u>ər</u>				
13.20 9.55 8.30 7.36 + 2.95 18.33	[CE/C]	,	0.			0. C			
24.45 +35.24 =T?	.45 +35.24 =T? 13.2 [+] 8.3 [+]	,	13.20 13.20 +		1	3.20 +			
			13.20 8.30 21.50 +			8.30 +			
[+]			8.30 2.95 24.45 +			2.95 +			
	[T]	GT	24.45 24.45		24.45				
	9.55 [+]	GT	9.55 9.55 +			9.55 +			
	7.36 [+]	GT	9.55 7.36 16.91 +			7.36 +			
					1	8.33 +			



6. REPETATIVE CALCULATION WITH REFERENCE TO DATE

		<u>Print</u> P	<u>Rounding</u> 5/4	De	<u>cimal</u> A	<u>Loan</u>	<u>GT</u>
Calculation	<u>Enter</u>		<u>Display</u>		Paper	<u>.</u>	
6.54 + 6.54 + 6.54 - 7.89 - 7.89 = ?	9.21.2007 [#/S]		9.212007	,	# 9.21	.2007	
	654 [+]		6.54 6.54	+		6.9	54 +
	[+]		6.54 6.54 13.08 +	-		6.8	54 +
	[+]		6.54 6.54 19.62 +	-		6.9	54 +
	789 [–]		6.54 7.89 11.73 -			7.8	89 –
	[-]		7.89 7.89 3.84 -			7.8	89 –
		14				3	.84 *



7. ROUNDING FOR ADDITION / SUBTRACTION

		<u>Print Rounding Decimal Loan GT</u> P ↓ 0
<u>Calculation</u>	<u>Enter</u>	<u>Display</u> <u>Paper</u>
3.4 + 2.1 = ?	3.4 [+]	3.4 + 3.4 + 3.4 +
	2.1[+]	3.4 2.1 5.5 + 2.1 +
	[T]	5. *
		<u>Print Rounding Decimal Loan GT</u> P 5/4 0
<u>Calculation</u> 3.4 + 2.1 = ?	<u>Enter</u>	<u>Display</u> <u>Paper</u>
5.4 + 2.1 = ?	3.4 [+]	3.4 3.4 +
		3.4 2.1 5.5 + 2.1

6. *



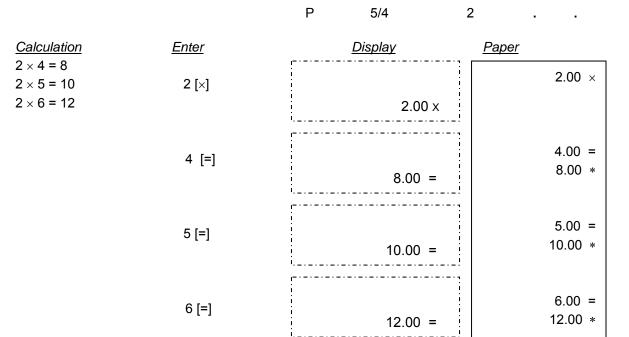
2.1[+]

8. RIGHT SHIFT

		Print P	<u>Rounding</u> 5/4	Dec	<u>cimal</u> 4	<u>Loan</u>	<u>GT</u>
Calculation	<u>Enter</u>		<u>Display</u>		<u>Pape</u>	<u>er</u>	
5.4321 + 2.34567 = ?	5.4321 [+]		5.4321 5.4321	+		5.43	21 +
	2.3457 [→]	r	5.4321 2.345 -	+			
	67 [+]		5.4321 2.34567 7.77777	+		2.345	67 +
	[T]		7.7778			7.77	78 *

9. CONSTANT MULTIPLICATION

Print Rounding Decimal Loan GT



10. CONSTANT DIVISION

		<u>Print</u> P	<u>Rounding</u> 5/4	<u>Dec</u>	<u>imal</u> 2	<u>Loan</u>	<u>GT</u>
<u>Calculation</u>	<u>Enter</u>		<u>Display</u>	·-·	<u>Paper</u>	-	
$755 \div 4 = 188.75$ $409 \div 4 = 102.25$	755 [÷]					755.	00 ÷
32 ÷ 4 = 8.00			755.00	÷ :			
	4 [=]						00 =
		¦ 	188.75	=		100.	75 *
	409 [=]						.00 =
		! ! !	102.25	=		102.	25 *
	32 [=]	·-·-·-				32.	00 =
	مح [[–]]	 	8.00	=		8.	00 *

11. DISCOUNT CALCULATION

		<u>Print</u>	<u>Rounding</u>	Decimal	Loan	<u>GT</u>
		Р	5/4	2	•	•
<u>Calculation</u>	<u>Enter</u>		<u>Display</u>	<u>Pape</u>	<u>er</u>	

Price = \$169.50 Discount = 14%			169.50 ×
Discount price = \$23.73 Net = \$145.77	169.5 [×]	169.50 x	
	14 [% <u>+</u>]	169.501 14.00 % 23.73 =	14.00 % 23.73 *
	[-]	145.77 %-	145.77 -%

12. DELTA PERCENTAGE CALCULATION

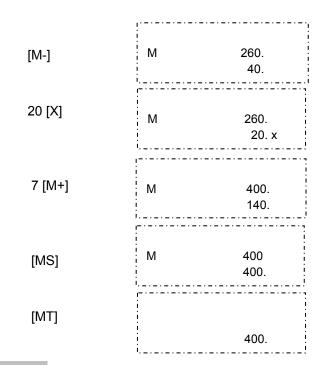
		<u>Print</u> P	<u>Rounding</u> 5/4	<u>Decimal</u> 2	<u>Loan</u> .	<u>GT</u>	
Calculation	<u>Enter</u>		<u>Display</u>	Pa	nper		
175,000–125,000 = 50,000	125000 [∆%]		125'000.00		125,000.0	0 Δ	
50,000 ÷ 125,000 x 100 = 40%			125'000.00	!	175,000.00 50,000.00		
	175000 [=]		125'000.00 175'000.00 ∆ 125'000.00 ∆%	=	40.00)∆%	
13. PROFIT MARGIN							

		<u>Print</u> P	<u>Rounding</u> 5/4	<u>Decimal</u> 2	<u>Loan</u>	<u>GT</u>	
<u>Calculation</u>	<u>Enter</u>		<u>Display</u>	<u>Pape</u>	<u>r</u>		
Cost = 100 Margin = 5% Sell = ?	100 [COST]	COST	ost 100.00		100.00 C		
		100.00		5.00 M% 5.26 ∆*			
	5 [MARGIN]	COST	100.00 5.00		105.26		
	i	SELL	105.26	= !			

Sell = 150.00 Margin = 10% Cost = ?	150 [SELL] 10 [MARGIN]	SELL	150.00 150.00	150.00 ◊ 10.00 M% 15.00 ∆*
		SELL COST	150.00 10.00 % 135.00 =	135.00 C

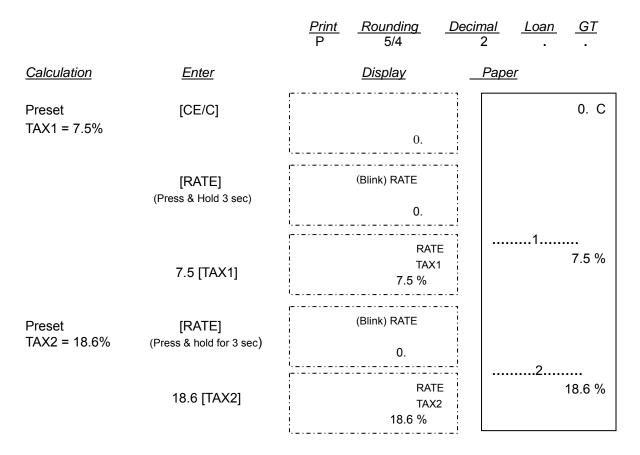
14. MEMORY CALCULATION

		Print P	<u>Rounding</u> 5/4	<u>Decimal</u> F	<u>Loan</u>	<u>GT</u>
Calculation	<u>Enter</u>		<u>Display</u>	<u>Pa</u>	nper	
100 + 200 = 300 90 - 50 = 40 20 X 7 = 140 300-40+140 =?	100 [+]		100. 100. +		10	0. C 0. +
	200 [+]		100. 200. 300. +		20	0. +
	[T]		300.		30	0. *
	[M+]	M	300. 300.		3	00. M+
	90 [+]	M	90. 90. +		9	90.+
	50 [-]	M	90. 50. 40			50
		M	300. 40.	!		40.*
					۷	ю. M-



15. TAX RATE PRESETTING

[T]



16. TAX CALCULATION

		<u>Print</u> P	<u>Rounding</u> ↑	Dee	<u>cimal</u> 2	<u>Loan</u>	<u>GT</u>
Calculation	<u>Enter</u>		<u>Display</u>		<u>Pape</u>	<u>r</u>	
Price = 261.56	[CE/C]	· · · · · · · · · · · · · · · · · · ·	0.			.1	
Price with Tax 1 = ?	261.56 [TAX1] [+]		261.56 19.62 ∆ 281.18 ^{TAX}	1+ =	7.5 19.62 281.18 281.18 1 7.5 19.62 261.56		62 A 18 *
Price without Tax 1=?	[TAX1] [-]		281.18 19.62 Δ 261.56	×1- =			.5 % δ2 Δ
				;			
	[CE/C]	!	0.			300.0 .2	0. C 00
Price = 300 Price with Tax 2 = ?	300 [TAX 2][+]		300.00 55.80 ∆ 355.80 ^{TAX}	2+			.6 % 30 ∆ 80 *
			355.80 55.80 ∆ 300.00				.6 % 30 Δ

		=	
VAT including TAX 1 and TAX 2:	200 [TAX 1] [TAX 2] [+]	200.00 52.20 Δ TAX1+ 252.20 TAX2+ =	200.00 1 7.5 % 15.00 Δ 18.6 % 37.20 Δ 1,2 52.20 Δ

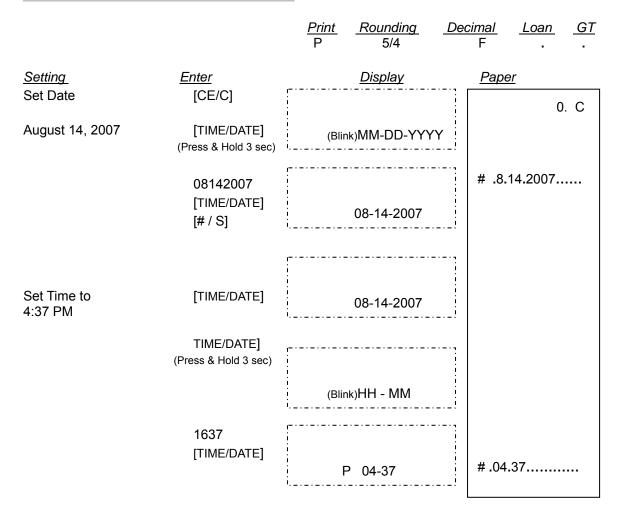
TAX2-

252.20 *

[TAX 2] [-]

17. DATE AND TIME DISPLAY PRESETTING

Price without Tax 2=?



18. LOAN CALCULATION

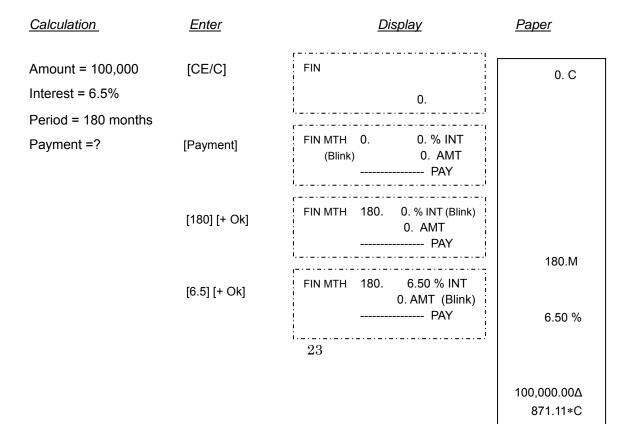
Note : The « FIN » symbol is displayed when Loan Calculation is ON.

Print	Rounding	Decimal	Loan	GT
Р	5/4	2	Loan	

Example : Assume you are interested in purchasing a house for 100,000.

The interest rate is 6.5%. You want to finance the loan over a period of 180 months. Calculate for payment per month.

Payment Calculation



[# / S]

	FIN MTH	180.	6.50 % INT
[100000] [+ OK]			000.00 AMT 371.11 PAY =

<u>Note:</u> To re-solve the loan amount for a different payment, interest, or months, press the amount key and follow the prompts. Press OK to accept existing figures or enter new figure, and press OK.

Interest Calculation

Calculation	<u>Enter</u>	<u>Display</u>	<u>Paper</u>
Amount = 100,000 Period = 180 months	[CE/C]	FIN	0. C
Payment = 871.11		0.	
Interest = ?	[Interest]	FIN MTH 0 % INT (Blink) 0. AMT 0. PAY	180. M
	[180] [+ OK]	FIN MTH 180. 0. % INT 0. AMT (Blink) 0. PAY	100,000.00 Δ
	[100000] [+ OK]	FIN MTH 180. 0. % INT 100'000.00 AMT 0. PAY (Blink)	871.11 c
	[871.11] [+ OK]	FIN MTH 180. 6.50 % INT 100'000.00 AMT 871.11 PAY =	6.50 *%

Month Calculation

Calculation	<u>Enter</u>	<u>Display</u>	<u>Paper</u>
Amount = 100,000	[CE/C]	FIN	0. C
Payment = 871.11		0.	
Interest = 6.5%		·	
Period = ?	[Month]	FIN MTH 0. % INT (Blink) 0. AMT 0. PAY	6.50%
	[6.5] [+ OK]	FIN MTH 6.5 % INT 0. AMT (Blink) 0. PAY	100.000.00.4
	[100000] [+ OK]	FIN MTH 6.5 % INT 100'000.00 AMT 0. PAY (Blink)	100,000.00 Δ
	[871.11] [+ OK]	FIN MTH 180 6.5 % INT 100'000.00 AMT 871.11. PAY =	871.11 c 180. * M

Amount Calculation

Calculation	<u>Enter</u>	<u>Display</u>	<u>Paper</u>
Payment = 871.11 Interest = 6.5%	[CE/C]	FIN 0.	0.C
Period = 180 month Amount = ?	[Amount]	FIN MTH 0. 0. % INT (Blink) AMT 0. PAY	180. M
	[180] [+ OK]	FIN MTH 180 0. % INT (Blink) 0. AMT 0. PAY	
	[6.5] [+ OK]	FIN MTH 180 6.50 % INT AMT 0. PAY (Blink)	6.50 %
	[871.11 [+ OK]	FIN MTH 180 6.50 % INT 100'000.30 AMT 871.11. PAY =	871.11 C 100,000.30 *Δ

9. TECHNICAL SPECIFICATIONS

Туре:	Desktop Adding Machine/Calculator, Electronic Print/ LCD		
Basic Operations:	Addition/subtraction and multiplication/division		
Capacity:	Input and result 12 digits		
Decimal System:	Add mode(A), Floating(F), Fixed(0,2,3,4)		
Functions:	4 rules, successive calculation, memory calculation, grand total memory, constant calculation, tax calculation, cost, sell margin calculation, and loan calculation.		
Printer:	Character wheel selection type.		
Ink Cartridge:	Two-color ink roller IR40T		
Paper width:	Width 57.5 ± 0.5mm X Diameter 30mm		
Display:	12 digit LCD display		
Operating Temp:	0°C ~ 40°C		
Dimensions:	198mm (W) x 250mm (D) x 57mm (H)		

Weight: 895 gram